GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO:67
ANSWERED ON:02.02.2017
Artificial Recharge of Ground Water
Udasi Shri Shivkumar Chanabasappa

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) whether the Government is aware that ground water levels in many parts of the country are fast depleting, if so, the details thereof and the steps taken to arrest this trend;

(b) whether majority of the States have so far not implemented the master plan for artificial recharge of ground water and if so, the details thereof and the reasons therefor;

(c) the allocation and utilization of funds for research pertaining to ground water during the last three years and the current year; and

(d) the steps taken by the Government to speed up the process of artificial recharge of ground water?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(DR. SANJEEV KUMAR BALYAN)
(a) Growing urbanization, industrialization and population, amongst others, have resulted into declining ground water levels in various parts of the Country. Central Ground Water Board (CGWB) carries out ground water monitoring, four times a year, on regional scale through a network of observation wells in the Country. Water level data for pre-monsoon 2016 compared with decadal mean of pre-monsoon (2006-2015) indicates decline in ground water level in 66% of the wells monitored. Details are given at Annexure −I.
The steps taken to control depletion of ground water level are given below :
â€¢ The National Water Policy (2012) formulated by Ministry of Water Resources, RD & GR, inter-alia, advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The National Water Policy (2012) has been forwarded to all State Governments/ UTs and concerned Ministries/ Departments of Central Government for adoption.
â€¢ CGWB has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during 2013, involving ground water scientists/experts. The Master Plan envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country at an estimated cost of Rs.79,178 crores to harness 85 BCM (Billion Cubic Metre) of water. The augmented ground water resources will enhance the availability of water for drinking, domestic, industrial and irrigation purpose. The Master Plan has been circulated to all State Governments for adoption.
â€¢ Central Ground Water Authority (CGWA) has been constituted under "The Environment (Protection) Act, 1986" for the purpose of regulation and control of ground water development and management in the Country. So far, CGWA has notified 162 areas in the Country for the purpose of regulation of ground water. Under the CGWA guidelines, in notified areas, no permission is accorded to extract ground water through any energized means for any purpose other than drinking water. However, for non-notified areas, ground water withdrawal by industries is regulated by means of guidelines/criteria as specified as CGWA.
â€¢ CGWA has issued advisories to States and UTs to take measures to promote/adopt artificial recharge to ground water / rain water harvesting. 30 States/UTs have made rain water harvesting mandatory by enacting laws or by formulating rules & regulations or by including provisions in Building bye-laws or through suitable Government Orders.
â€¢ This Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for its regulation and development which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model bill.
(b) The Master plan for Artificial Recharge is a conceptual document circulated to the States for guidance and adoption. Water conservation and artificial recharge to ground water are being undertaken by the States/ Union Territories under various schemes including Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) etc.
(c) Ministry of Water Resources, RD & GR sponsors research projects pertaining to surface water, ground water and climate change under "Research & Development (R&D) Programme in Water Sector". The budgetary allocation for R&D programme in water sector and utilization for research pertaining to ground water during last three years and current year is given at Annexure-II.

(d) Measures taken by the Government for artificial recharge of water are as follows:
â€¢ Special focus is given through Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for water conservation and water harvesting structures to augment ground water. In addition, priority has been given for construction of farm ponds in the year 2016-17 to harvest rain water.
â€¢ The Ministry of Drinking Water & Sanitation has suggested all States to adopt water conservation measures like roof top rainwater harvesting, erecting sustainability structures for water conservation etc. For creating such sustainability structures, 10 % of National Rural Drinking Water Programme (NRDWP) funds are provided to the States.
â€¢ Department of Land Resources is currently implementing 8214 watershed development projects in 28 States covering an area of about 39.07 million ha. under the Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana

(PMKSY) principally for development of rainfed portions of net cultivated area and culturable wastelands. The major activities taken up under the WDC-PMKSY, inter-alia, include ridge area treatment, drainage line afforestation, soil and moisture conservation, rain water harvesting, horticulture, and pasture development etc.
â€¢ CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans, with community participation.
â€¢ MoWR, RD & GR has also launched 'Jal Kranti Abhiyan' (2015-16 to 2017-18) in order to consolidate water conservation and management in the Country through a holistic and integrated approach involving all stakeholders, making it a mass movement.
â€¢ CGWB has been organizing mass awareness programmes in the Country to promote rain water harvesting and artificial recharge to ground water; more than 17 lakh children participated in a nation-wide painting competition in the last year to promote conservation of water.

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ANNEXURE − I

Annexure referred in reply to Lok Sabha Unstarred Question No. 67 dated 02.02.2017 regarding "Artificial Recharge of Ground Water"

State-wise Decadal Water Level Fluctuation with Decadal Mean
Pre-monsoon (2006 to 2015) and Pre-monsoon 2016

S.No.	Name of State	No. of wells Analysed	Rise		Fall	
			No.	%	No.	%
1	Andhra Pradesh	547	236	43	308	56
2	Arunachal Pradesh	14	10	71	4	29
3	Assam	182	84	46	98	54
4	Bihar	551	180	33	369	67
5	Chandigarh	11	4	36	7	64
6	Chhattisgarh	616	165	27	451	73
7	Dadra & Nagar Haveli	12	6	50	6	50
8	Daman & Diu	10	2	20	8	80
9	Delhi	115	26	23	89	77
10	Goa	70	41	59	29	41
11	Gujarat	738	254	34	475	64
12	Haryana	643	184	29	454	71
13	Himachal Pradesh	95	36	38	59	62
14	Jammu & Kashmir	225	83	37	142	63
15	Jharkhand	212	86	41	126	59
16	Karnataka	1380	415	30	949	69
17	Kerala	1240	454	37	779	63
18	Madhya Pradesh	1343	502	37	838	62
19	Maharashtra	1487	437	29	1041	70
20	Meghalaya	17	6	35	11	65
21	Odisha	1103	395	36	705	64
22	Puducherry	6	5	83	1	17
23	Punjab	613	129	21	482	79
24	Rajasthan	829	346	42	481	58
25	Tamil Nadu	587	345	59	242	41
26	Telangana	377	66	18	308	82
27	Tripura	28	21	75	7	25
28	Uttar Pradesh	629	95	15	534	85
29	Uttarakhand	44	21	48	23	52
30	West Bengal	899	310	34	589	66
Total		14623	4944	34	9615	66

Note: 64 wells show no change in water level

ANNEXURE - II

Annexure referred in reply to Lok Sabha Unstarred Question No. 67 dated 02.02.2017 regarding "Artificial Recharge of Ground Water"

Budgetary Allocation for R&D Programme in Water Sector of MoWR, RD & GR and Utilization for research pertaining to Ground Water

(During last three years and current year)

Year	Allocation for R&D Programme in Water Sector (Rs. in Lakhs)	Utilization for research pertaining to ground water (Rs. in Lakhs)
2013-14	1430.00	13.43

2014-15 1030.00 8.06
2015-16 355.00 6.27
2016-17
(Current Year) 225.00 8.93
Total 3040.00 36.69

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